HEATMASTER & MILITARY 401 OIL BURNING FURNACE INSTRUCTIONS

Genisys 7505
Primary Control

Beckett AFG
Oil Burner

SIEBRING

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Included: Beckett AFG Manual, Beckett Quick Reference Guide, Honeywell L4064 Fan & Limit Controller pamphlets.

NEW INSTALLATIONS FOR SIEBRING FURNACES

This appliance is manufactured for commercial and industrial use.

This appliance shall be installed in accordance with the standard for the installation of oil burning equipment. NFPA31 (Latest version)

Uncrate the furnace and block up level. Use nonflammable blocks. Do not rest on flammable material. Allow 12" on any side and 18" space from the top to any flammable walls or materials in storage.

Install chimney with the barometric damper. (See picture suggestions page 4) Try to keep damper in the first 2' of stack from the furnace. Use a "T" and an elbow for ease of installation and achieve a -.02" to -.04" water column for the draft.

DO NOT use any method to restrict the draft or reduce the chimney size.

DO NOT restrict the air flow into the blower or the discharge opening.

Hook up the fuel oil system to a #2 heating fuel as shown on the pump label. A two pipe system is preferable. Be sure to note the insertion of the 1/16" by-pass plug in the pump for the two pipe set up. (DO NOT attempt to store or use gasoline or other flammable liquids in this appliance or in the vicinity of the burner. **EXPLOSION HAZARD**) See Beckett AFG manual, page 12, for oil tank and supply system examples.

Hook up thermostat – Place the thermostat 20' to 30' from the furnace.

- Try to avoid the hot air flow from the furnace on the thermostat.

- Connect thermostat wire to the 24 volt connection of the burner relay marked (T) (T). (Box on right side of burner, see page 13.)

Connect electrical – Use the adequate size wire (local electrical code) to feed the unit. A test reading of 115 volts when all the normal electrical demands are on line is required. Use copper conductors only. Provide a minimum 15A 115V breaker or fuse. DO NOT exceed 25 amps. Consult and use the most recent National Electrical Code (NFPA 70), and meet all local inspection requirements for installing this heater.

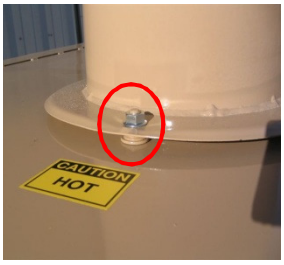
WARNING: DO NOT store or use gasoline or flammable vapors or liquids in the vicinity of the appliance.

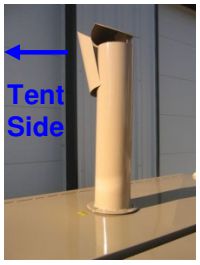
CAUTION: REFRACTORS WILL BE BRITTLE. If a furnace must be moved after being used for an extended period of time, use a gentle touch when handling the furnace.

401 Specific

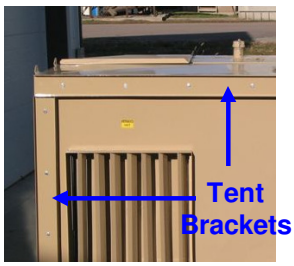
Fill tank with # 2 diesel fuel or heating fuel. DO NOT use gasoline! The tank holds approximately 250 U.S. gallons.

The burner is served with a two-pipe system; supply & return. The fuel filter is installed on the supply line. The pump should prime itself. The return line prevents cavitation. Make sure the connections are tight and have not loosened in shipment.

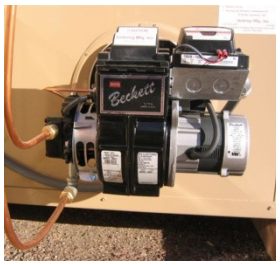




The chimney is held in place by nuts threaded onto studs mounted to the furnace. The shield should be facing the tent material. The bolt pattern is designed in such a manner that the shield can only be positioned one way. The chimney MUST be installed prior to furnace operation.



Tent mounting brackets should be removed prior to setting the furnace next to the tent. After locating the holes in the tent mounting bracket, bolt the clamping strips in place and remove the excess canvas to allow the air to circulate from the tent.

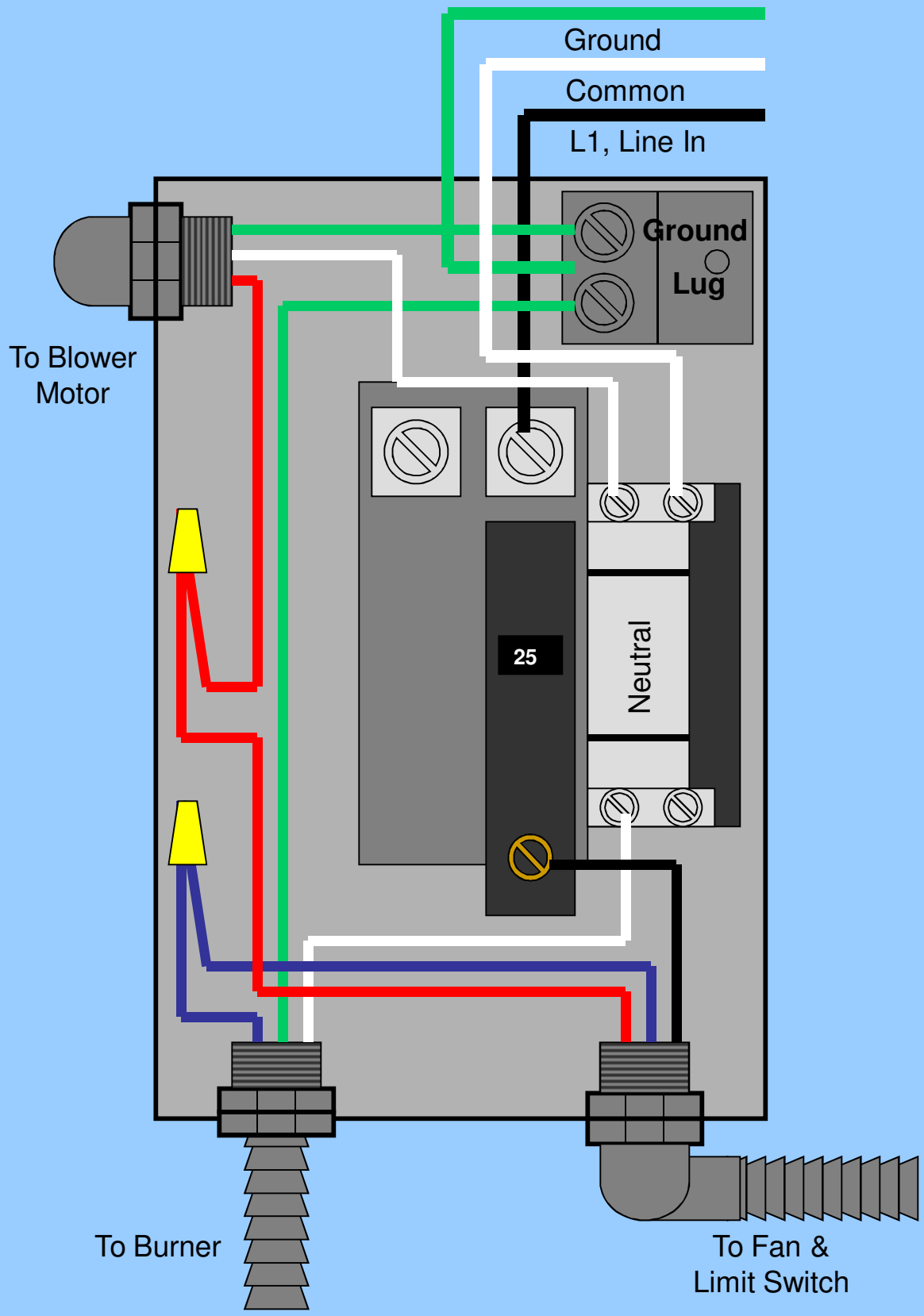


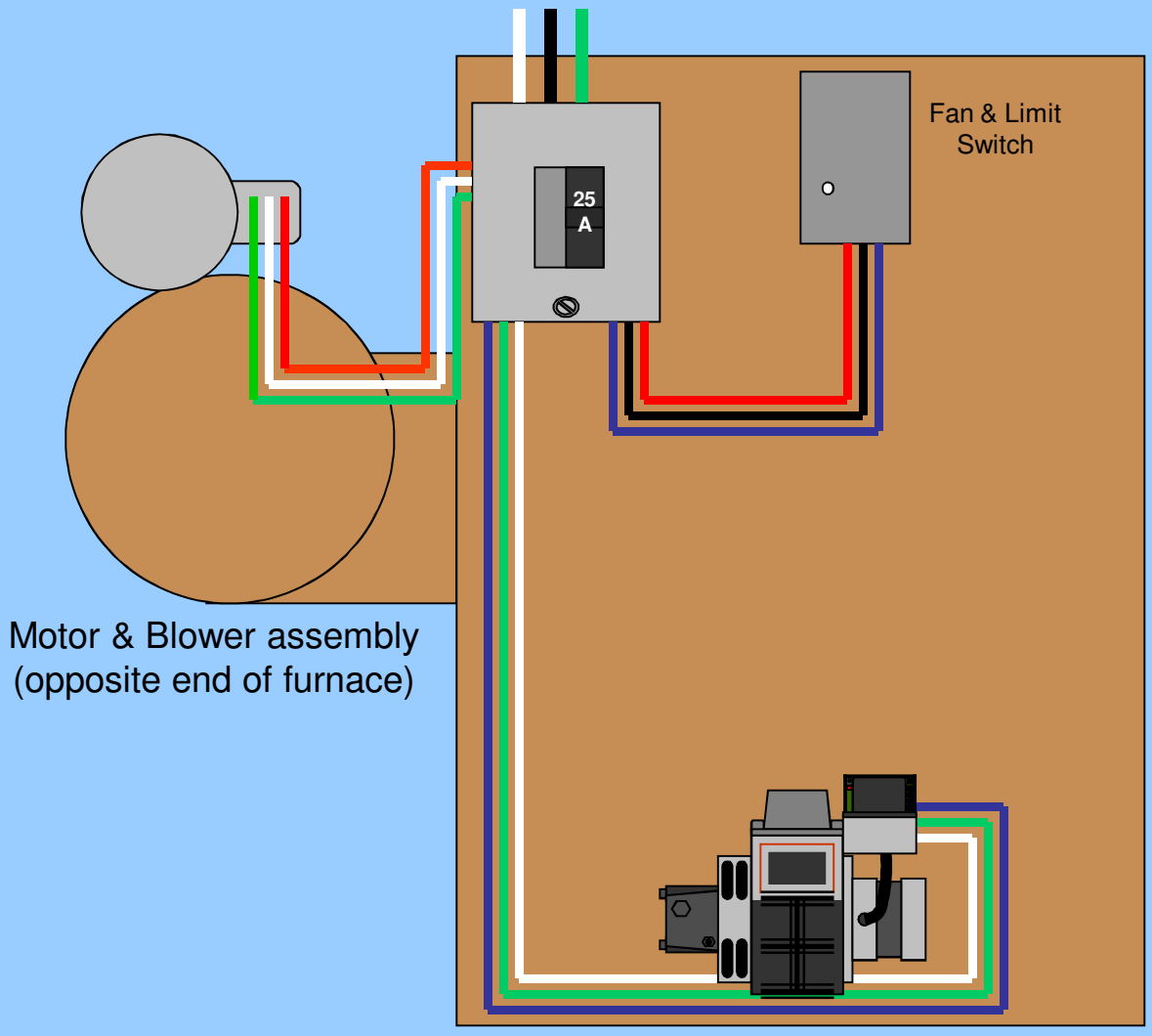
The burner is housed beneath the weather cover shroud on the exterior side of the heater next to the fuel tank. Remove the two bolts and swing open the cover to gain access to the burner.

Wiring is contained in the blower housing area. 25' of 12-3 wire is provided. The customer is responsible for providing the appropriate plug.

If the burner does not start on the first call for heat, depress the red reset button. If the burner is "Locked Out," depress the red reset button for 15 seconds to reset. For further instructions, refer to the Beckett AFG manual and the Genisys Primary Control instruction pamphlet.

SQUARE D BREAKER BOX – HM Power Hook-up 120VAC





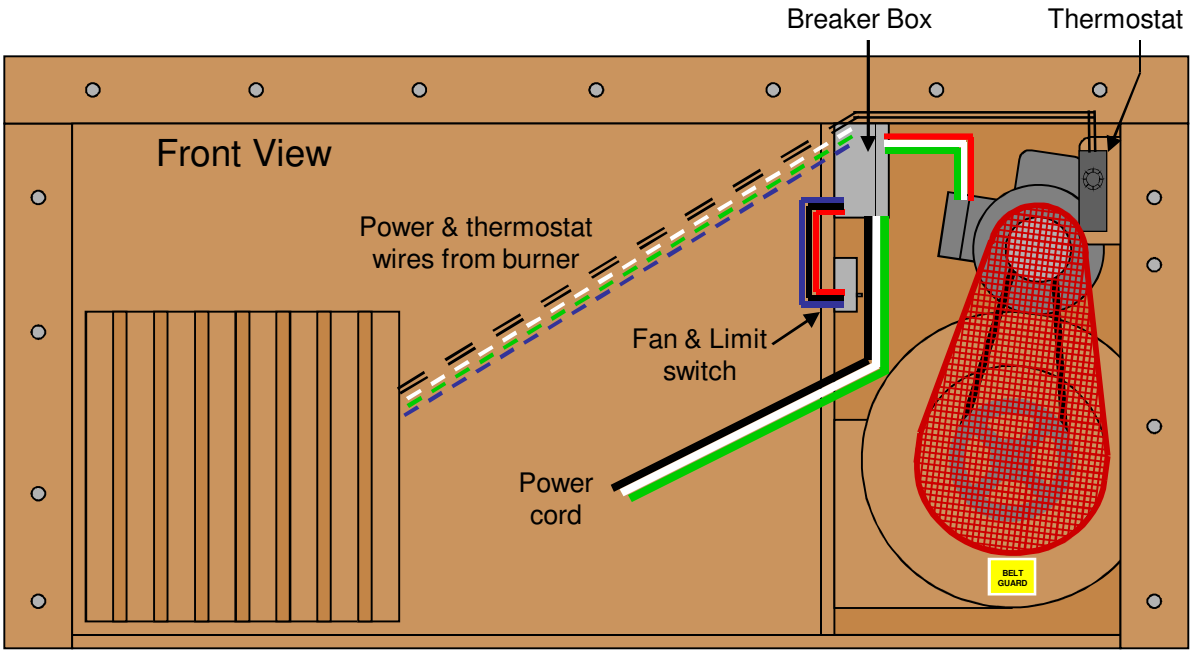
WARNING: Failure to provide a proper electrical ground could result in electric shock or fire.

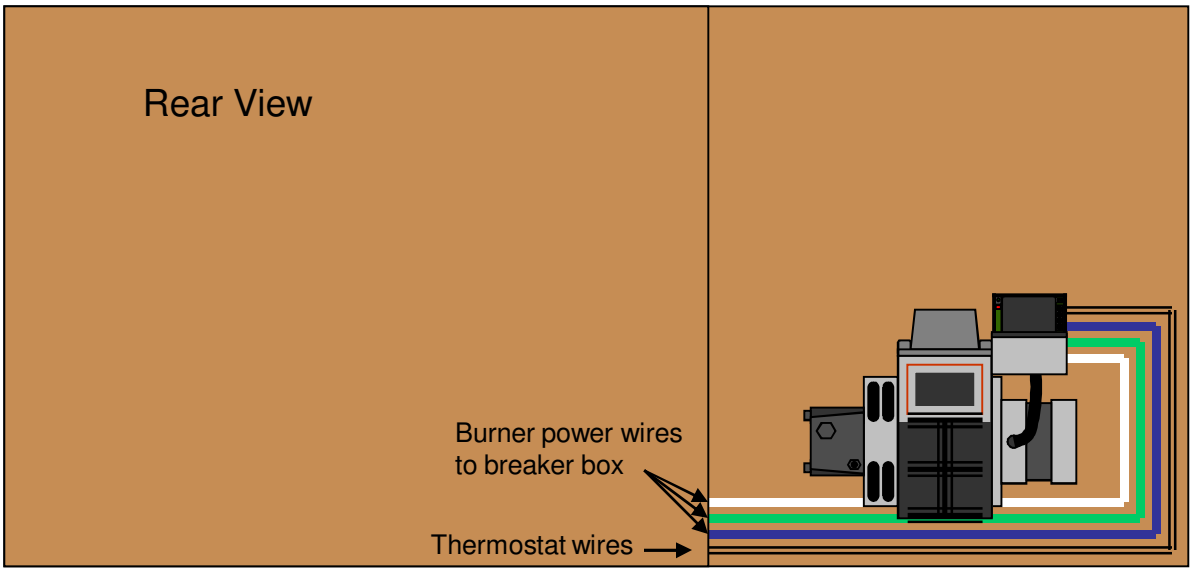
-Typical Heatmaster Wiring:

-Provide furnace with its own separate electrical circuit from the building's main breaker panel and a means of circuit protection.

- Wire size to be determined by local code.

401 Wiring

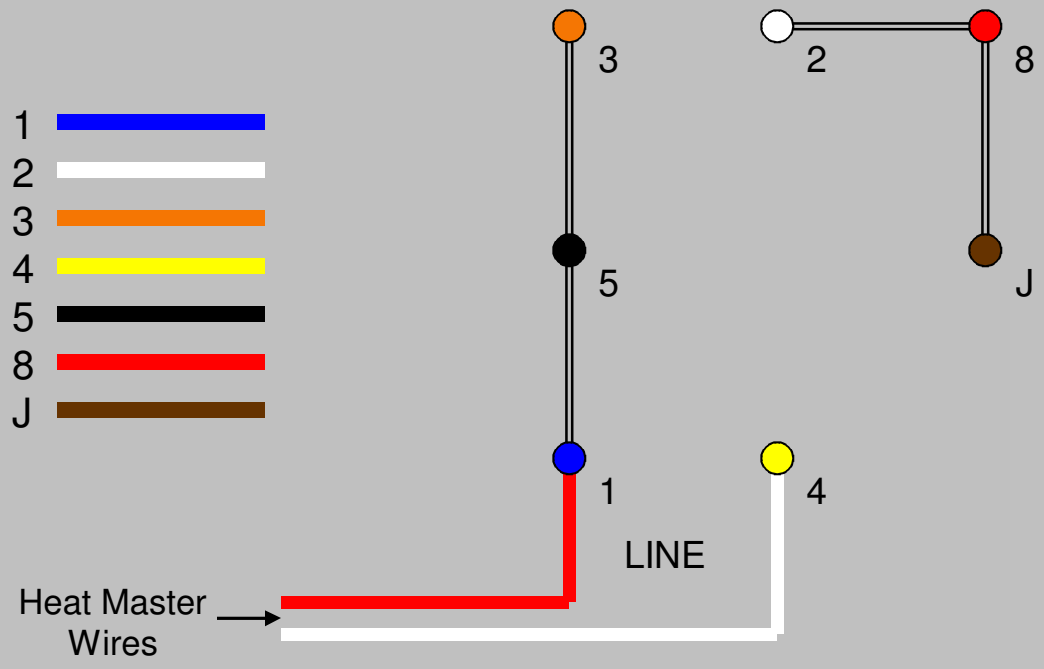




WARNING: Failure to provide a proper electrical ground could result in electric shock or fire.

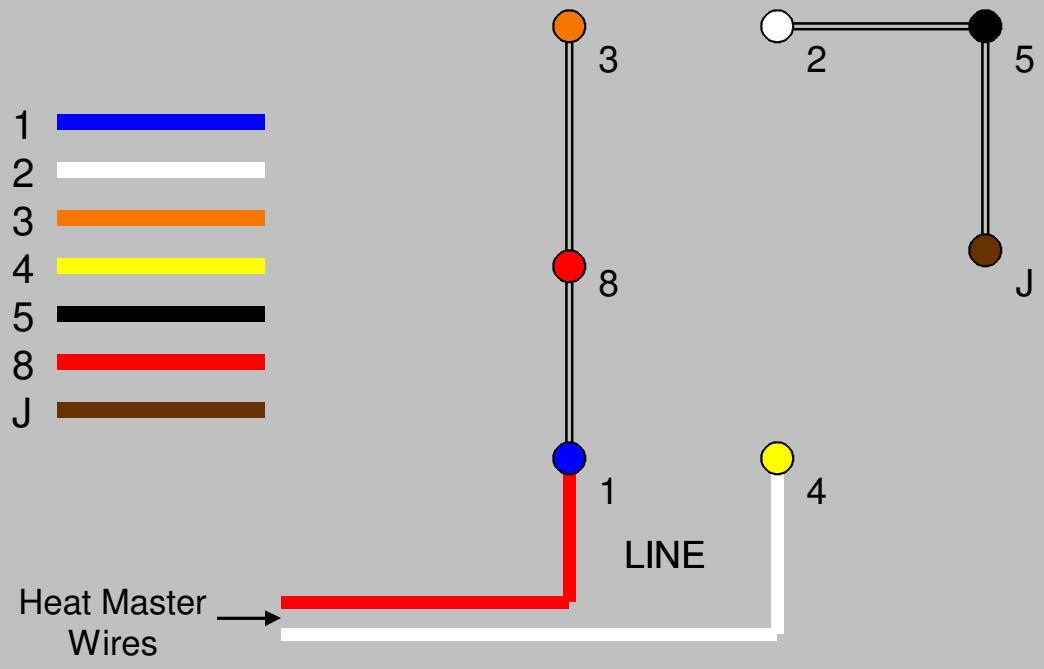
Baldor Electric Motor Wiring – Low Voltage (MIL 401)

(Excludes CF & HW350)



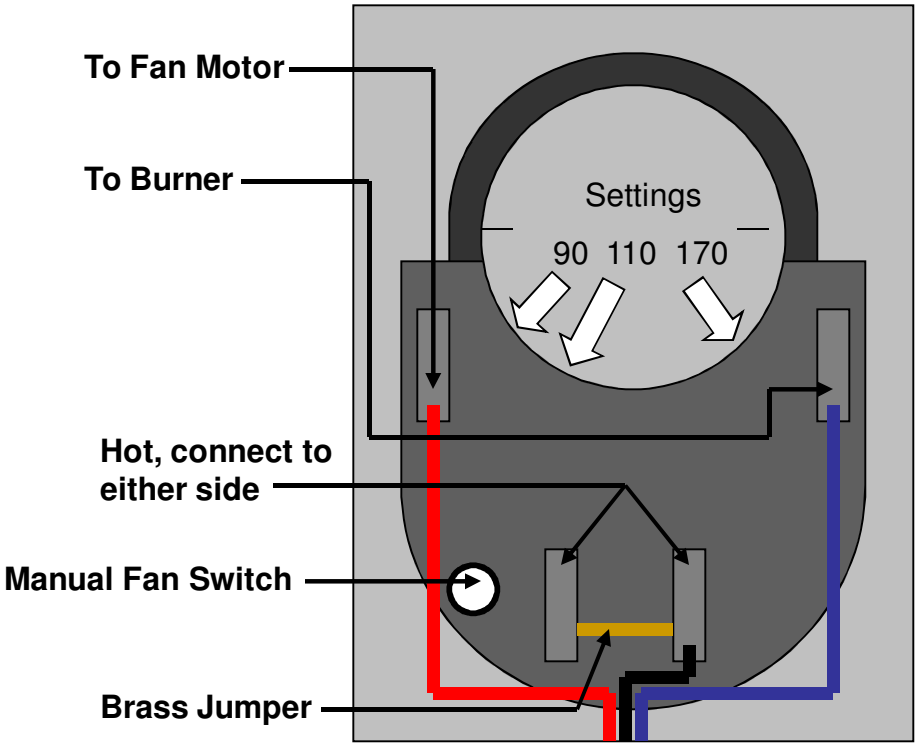
Note: Interchange 5 and 8 leads to reverse rotation

Heat Master Counter Flow & Heatwave 350



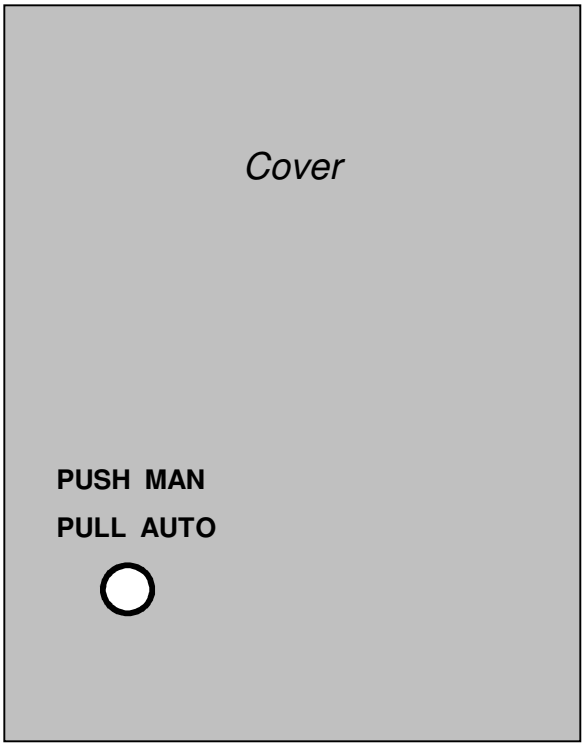
Fan & Limit Control

Fan Off: 90 Fan On: 110 High limit: 170



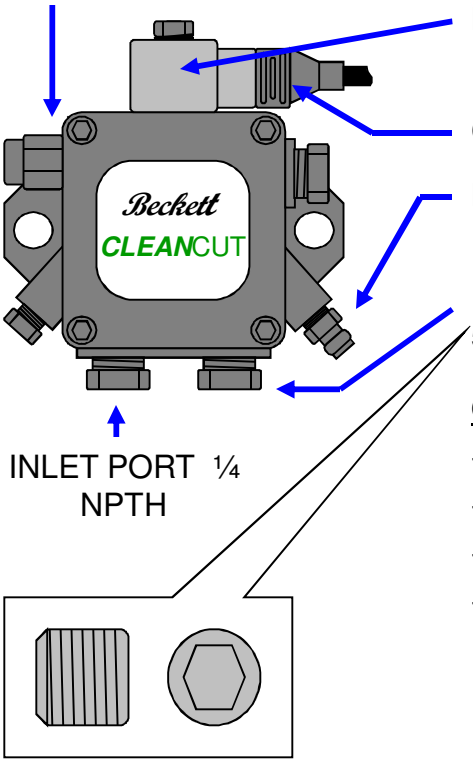
Caution: When adjusting set point levers, hold the scaleplate dial to keep it from turning and straining the sensing equipment

Note: For constant fan operation, push manual fan switch in. For fan to cycle automatically, pull button out.



Beckett "***CLEAN***CUT" Fuel Pump – A2EA-6520

NOZZLE PORT 3/16" FLARE FITTING



BYPASS SOLENOID VALVE

CORD SET

BLEED PORT

RETURN PORT ¼ NPTH (INSTALL 1/16" BYPASS PIPE PLUG FOR TWO-PIPE SYSTEM ONLY, USE 5/32" ALLEN WRENCH).

INLET PORT ¼ NPTH

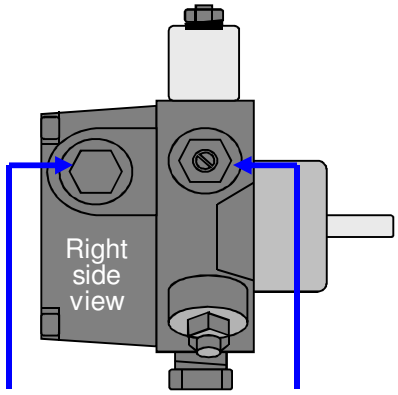
Oil Line Hook Up:

-Use two (2) pipe system where possible

-Use only # 2 heating fuel or diesel fuel

-Use individual filter for each unit

-Do not hook multiple units to a single supply line



INLET PORT ¼ NPTH

PRESSURE ADJUSTMENT SCREW

Prime the Pump

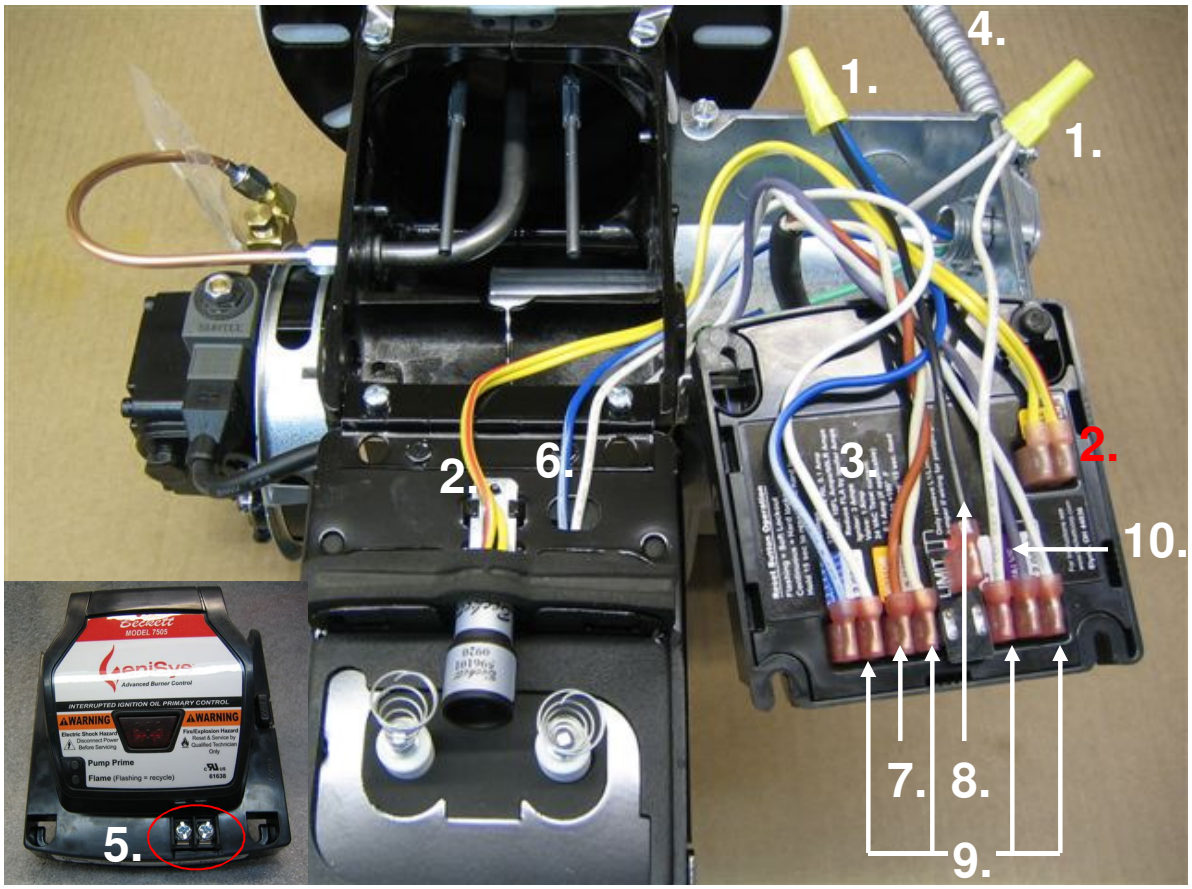
- Bleed air from unit as soon as burner starts rotating.

-To bleed unit, attach a clear plastic hose over bleed port fitting. Loosen the fitting and catch the oil in an empty container. Initiate a call for heat. Tighten the fitting when all air has been purged from the oil supply system.

-If burner locks out on safety during bleeding, reset the safety switch and complete the bleeding procedure. (Refer to Genisys 7505 Primary control instructions for special bleeding procedures, sequences and extended lockout times).

-If burner stops after flame is established, additional bleeding may be required. Repeat the bleeding procedure until pump is primed and a flame is established when the bleeder port is closed.

Observe all local Codes and Regulations for proper set up.



Beckett AFG Burner to Furnace Wiring (Genisys 7505)

1. Two primary control wires (L1 - black & L2 - white) are connected to the 120V power source (blue L1 & white L2). This has the function of powering the burner, which in turn sends power to the igniter, burner motor, solenoid valve and 24V control circuit.
2. The two yellow wires connect to the cad cell eye and the relay as a “flame out” safety shutdown after 15 seconds (Genisys 7505).
3. The 7505 series primary control provides a ¼” quick connect terminal for all required component wiring:

   - Blue or Blue/white stripped wire connects the igniter (6.).

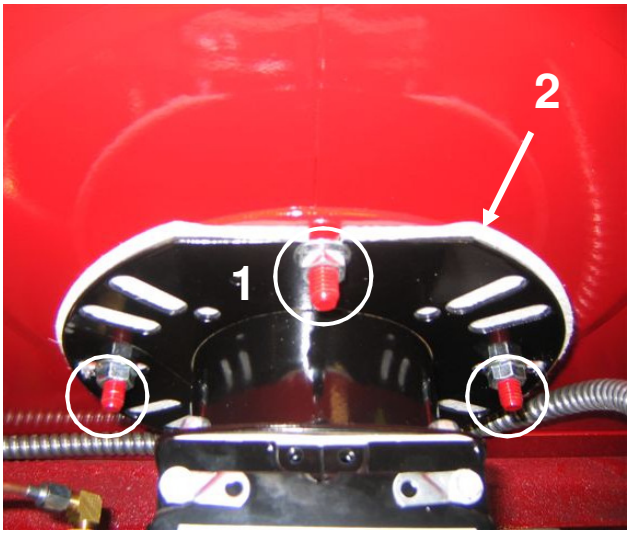
   - Orange connects the burner motor (7.).

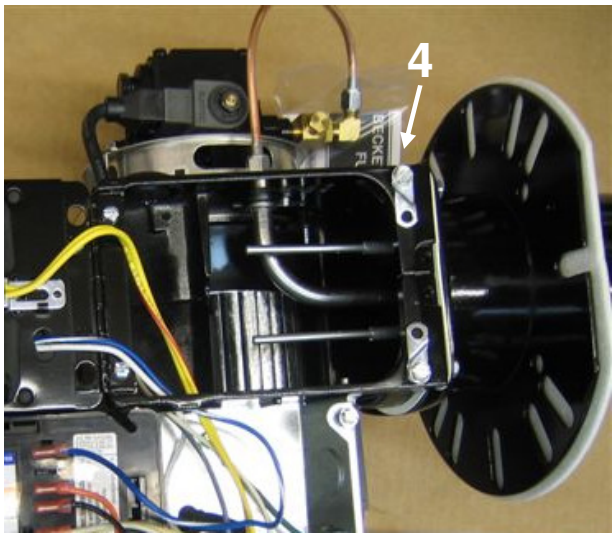
   - L1 black connects power lead (8.).

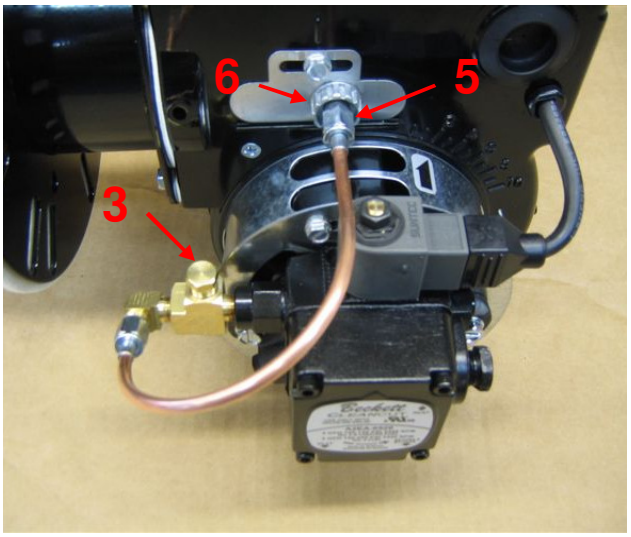
   - 4 neutral positions connect the neutral wire from the igniter, burner motor, primary control and main burner power (9.).

   - Violet/purple connects the fuel solenoid valve (10.).
4. Flexible conduit from furnace breaker box.
5. The 2 lower “T T” terminals on the front of the control (see inset) connect the thermostat.

1. The burner is held in place by three, ⅜” X 16 NC thread studs and nuts.
2. The white fiber disk is a flame resistant material and acts as a burner gasket.
3. Pressure gauge port.
4. Electrodes and nozzle are accessible by accomplishing the following steps:
   - loosen the igniter hold-down clips (4).
   - Rotate the igniter back
   - Loosen the copper tube nut (5)
   - Remove the splined lock nut (6)

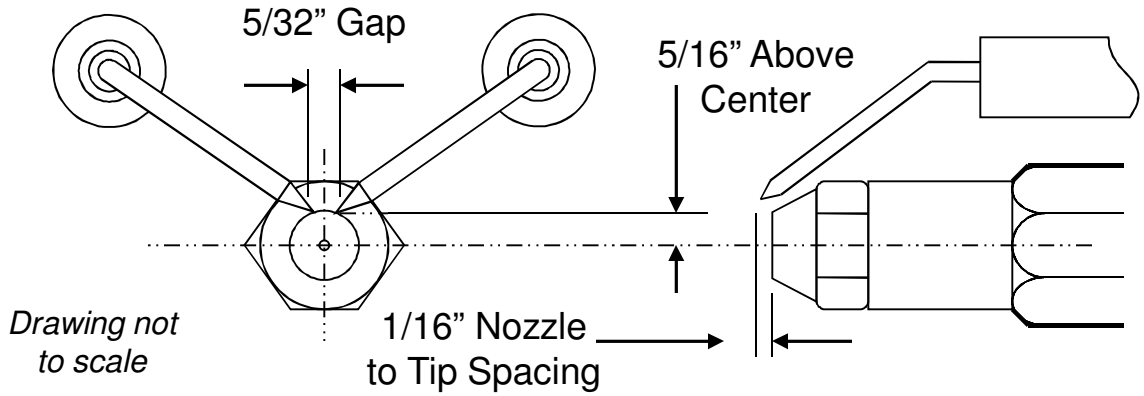






Setting the Electrodes

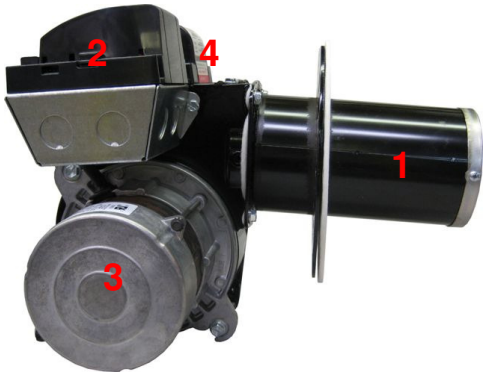
(See Beckett AFG manual for additional information)



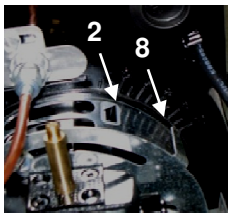
Burner Specifics

The Beckett AFG Oil Burner

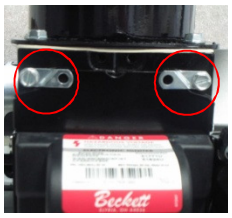
The flame retention burner uses # 1 or # 2 heating or diesel fuel. The flame looks short (12 – 14") and medium yellow. The air tube (1.) is 5" for Siebring products. Pictured are the primary control (2.), the 1/7th HP motor (3.) and the 20,000 volt igniter (4.). The burner has a 15 sec. auto shut down if there is no fuel, flame or the cad cell eye is dirty.



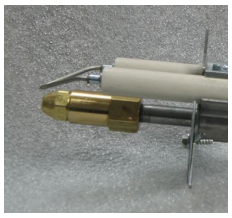
The fuel pump is factory set to 100 PSI. This insures proper atomization of the fuel. The installed gauge shows the test port location (gauge not included).



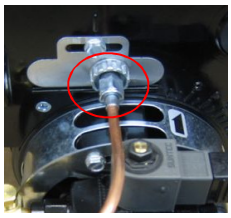
The air shutter should be set on 8 and the air band should be set on 2. The band adjusts large air amounts and the shutter adjusts small amounts. Smoke requires more air. Burning eyes and nose from fumes requires less air.



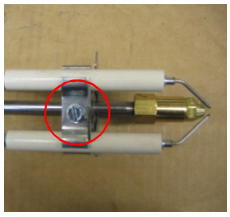
Going into the burner requires loosening of the two screws and moving the igniter hold-downs. Lifting the igniter will expose the oil pipe and electrodes. The copper tube (⅛") has a hex flare nut and a splined lock nut (below) for holding the oil tube in the proper alignment.



Electrodes are to be 1/16" ahead of the nozzle face, and 5/16" above the centerline of the nozzle orifice. See Beckett AFG manual for proper "F" head adjustments.

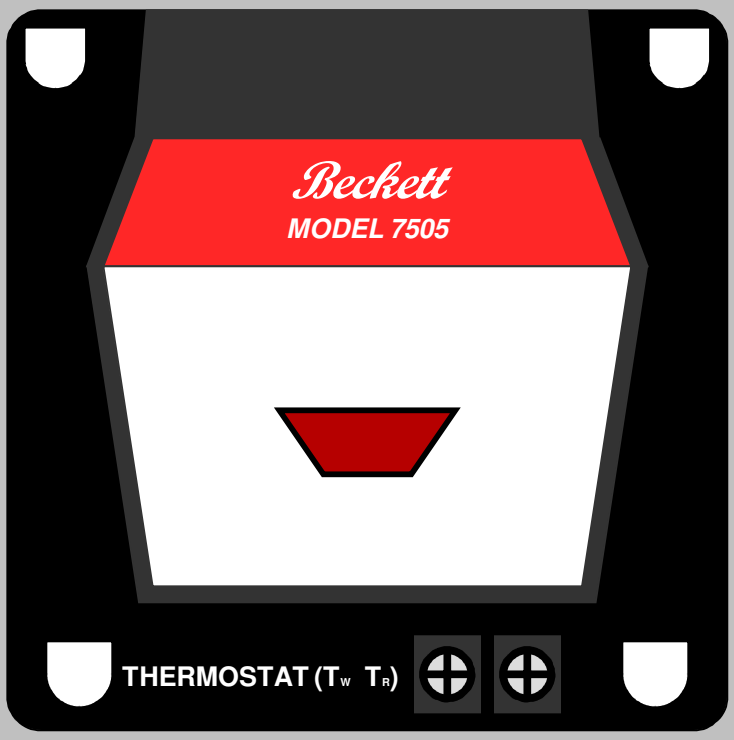


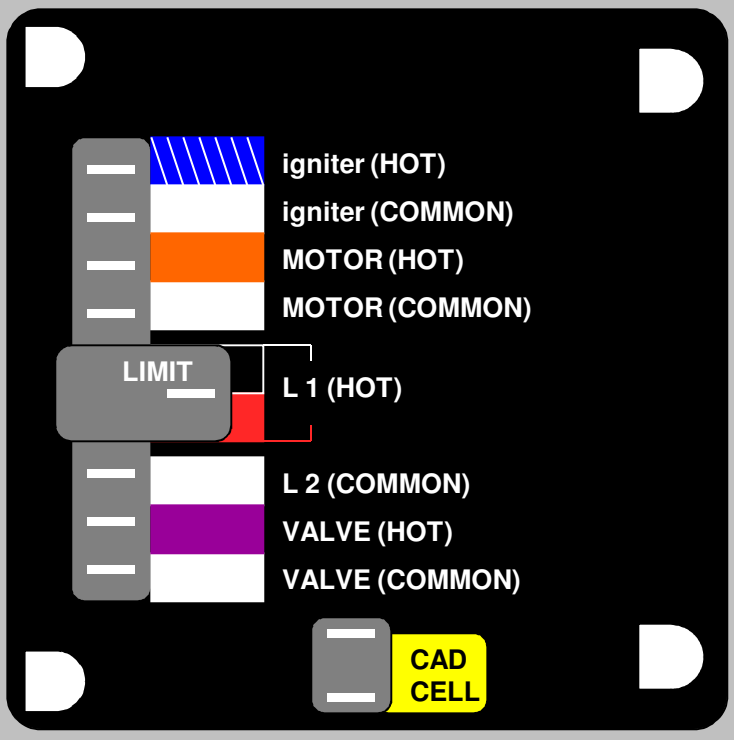
The electrodes are to be 5/32" apart. A static plate air restrictor is shown.



The nozzle and nozzle adapter should be tight, but not over tightened. Loosen the bolt on the electrode clamp to avoid cracking the ceramic insulators when removing the fuel nozzle

Genisys Primary Control





Reset Button Operation

Flashing = Soft Lockout

Continuous = Hard Lockout

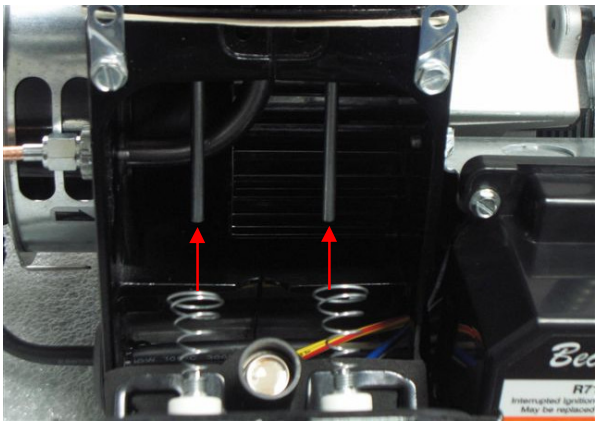
Hold 15 sec to reset from hard lockout

Burner Specifics (continued)

The "T_W" and "T_R" terminals, normally the location of the thermostat wires, have a jumper installed to simulate a call for heat (Genisys 7505).

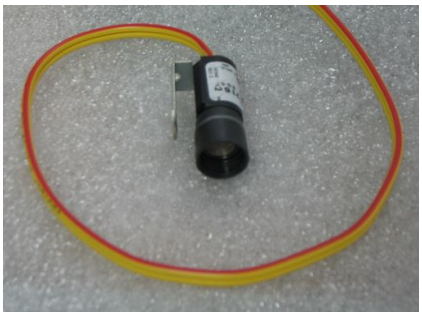
The R8184G is installed on some models. The R8184 does not have the circuitry for the pump solenoid "valve on" delay, ignition delay and purge cycle.

Note: When purchasing a replacement primary control, please make note of the model number.

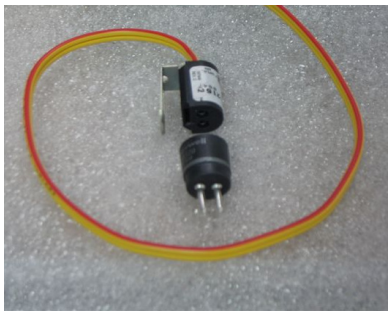


The igniter transformer springs must contact the electrode rods when the transformer is in place and secured for operation.

Cad Cell Eye Assembly mounted to the igniter.



Cad Cell Eye Assembly removed from the igniter.



Cad Cell Eye Assembly. Sensor eye unplugged from mounting socket.

The cad cell is the sensor that tells the primary control that the fire is burning and the pump can continue to pump oil. If the surface is over heated or smoked up, a false shut down will occur after 15 to 45 seconds depending on the factory set lock out time stated on the primary control. The cell must be in (No Light) before the signal to start the burner is completed. Trying to start the burner during testing of the igniter will fail if the eye is seeing light as it will prevent the burner from starting. Disconnect one yellow lead to the cell to facilitate testing of the igniter.

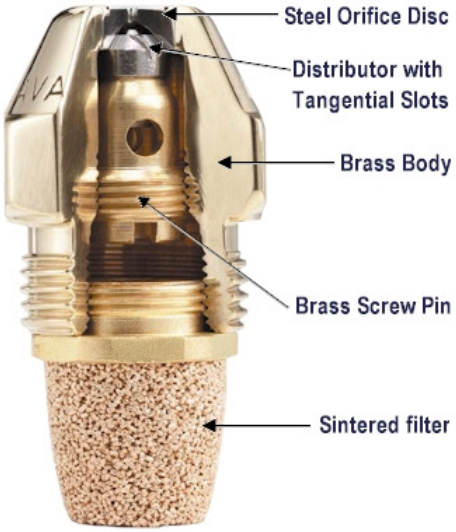
Shock Hazard—Use Insulated Screw Driver

The yellow wire connects to the (F) terminals on the R8184 (gray) series primary control or the spade connectors marked “CAD CELL” on the bottom of the newer R7184 & Genisys series controls. A timer starts when the burner starts and shuts the burner down if no signal passes the dark cadmium screen. In servicing, care should be taken to remove the 1 terminal wire to check the primary control shutdown capacity. Overheating during back draft can (destroy) the eye surface.

Burner Specifics and Dimensions (continued)

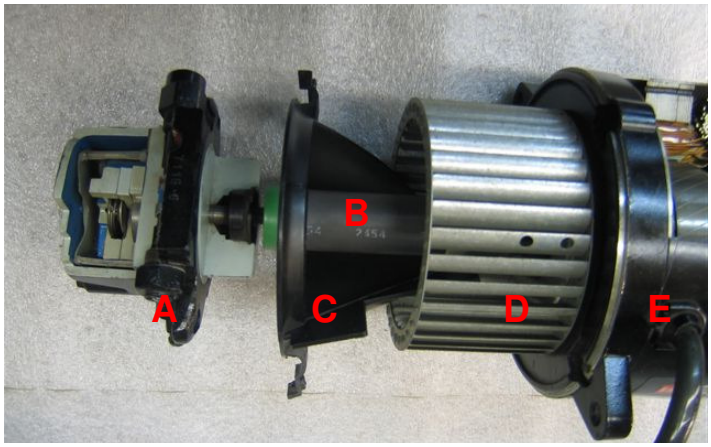
The transformer or the igniter can fail any time from start up, to and thru the useable life of the heater. Down draft or reverse draft from exhaust fans operating when the furnace is hot can ruin the insulation of the 20,000 volt igniter.

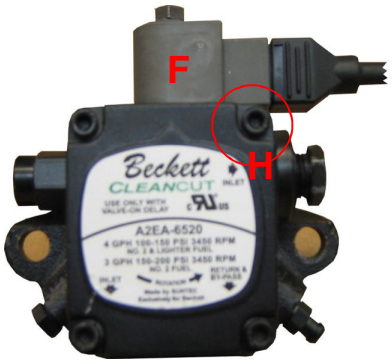
Typical Heatmaster Nozzle



The nozzle can be disassembled and cleaned by unscrewing the filter section. A retainer spacer and the rotor (fine grooves spin the oil) prior to going out of the orifice as a mist at 100 PSI pressure. The nozzle body is sized for the proper cone pattern for the spray and the orifice for the correct volume of oil at 100 PSI. The pattern is marked with degrees of spread such as 45 or 80 degrees. The gallons per hour are marked as .75 or 3.00 and many sizes in between. The factory installed nozzle on the Military 401 is 2.75 GPH 80°B.

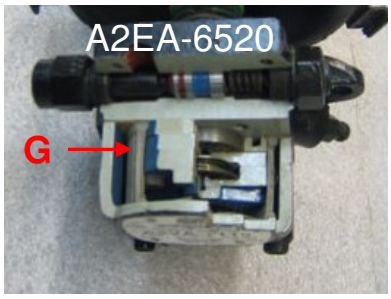
Typical Oil Burner Nozzle





A. The fuel pump is made for #2 heating fuel. Waste oil and other contaminates such as water can ruin the pump. **B.** The coupling is plastic and can be ruined by reverse drafts, sucking heat back through burner. **C.** Air guide directs the combustion air from the blower wheel **D.** into the blower. The air shutter controls the quality of the flame and the efficiency of the burner (shown on page 12) **E.** The burner motor is 1/7th HP, and turns at 3450 rpm. There is a thermal reset on some models. If motor over heats after cooling, depress the red reset button to restart. Two bolts mount the motor to the burner housing.

The fuel pumps are single stage. The A in the serial number is for single stage and B for two stage. This designates the vacuum lift for fuel pumping capacity, B having two gears for high lifts of fuel (see instructions). The solenoid valve **F.** delays oil flow 15 sec. till spark is established.
Two pipe systems require a special set screw (by-pass plug) furnished for continuous fuel flow. This eliminates air pockets in the fuel line. The plug for removal to install the set screw is on the under side of the pump. See diagram on page 9 and the instructions on the white pump label. The pump has a strainer **G.** that should be cleaned periodically. Access the strainer by removing 4 hex drive screws **H.** from the pump cover.



Pump couplings **B.** join the motor and fuel pump as a common drive for the blower and pump. The couplings are made of plastic and heat will damage the body of the coupling when down drafts occur. The end for the pump is smaller and larger for the motor. The correct length for each pump manufacturer is different but can be cut to length. Deformed couplings fold up and cause burner failure. Exhaust fans in a room are the biggest cause of the back flow of heat in greenhouses. The air guide **C.** is a source of problem when the reverse draft causes it to be deformed and rub on the blower wheel. Failure to replace a deformed air guide will cause flame and combustion problems when the unit is not in place. Please replace deformed parts.

ANNUAL INSPECTION

- Clean or change nozzle. (Use manufacturers recommended size) **DO NOT OVER FIRE!**
- COMBUSTION TESTS
  Draft .02 - .04 inches of water column
  Carbon Dioxide (CO_2 should be between 10% & 13%)
  Smoke Reading #2 - #3 for old units & #0 - #1 for new units
- CAD CELL
  Flame Detector should read below 1600 Ohms
- FUEL FILTER CARTRIDGE – Change or clean each season
-TRANSFORMER
  ¾ -inch spark jump – 20,000 volts. USE INSULATED SCREWDRIVER TO TEST.
- PUMP PRESSURE – Should be 100 lbs. to 110 lbs.
- ELECTRODE SETTINGS
  Beckett: 1/16" in front of nozzle tip
  5/32" gap
  5/16" above the center of the nozzle
  5/16" back from the flame cone
- HEAT CIRCULATION SYSTEM
  Fan & Limit Switch – 90°, 110° and 170° F. respectively
  Belt ½" to ¾" play at mid point
  Oil motor bearings lightly 1-2 drops (if applicable)
  Oil blower bearings (if applicable)
- OIL SUPPLY
  Drain off any water
  Check pipes for leaks
- CHECK THERMOSTAT
  There should be a "click" when calling for heat.
- Check the general setup of the furnace to make sure there is make-up air for the burner.
- If any ventilation systems were installed, check for NEGATIVE PRESSURE which may have occurred as a result inside the house. This may cause the chimney to not work properly.
- Check the chimney for proper barometric (draft control) free movement.
- Roof caps, which do not create vacuum or let in weather are a must.
  Follow the recommended chimney set up from this manual to avoid water and condensation problems.

BASIC TROUBLESHOOTING

Recommended Equipment

1. Electrical test meter (VOLTS, OHMS, AMPS).
2. Ignition transformer tester
3. Combustion analyzer kit (oxygen or carbon dioxide, smoke, stack temperature, draft, system efficiency).
4. Pressure/vacuum gauge (0-200 psig and 0-30: Hg).
5. Full assortment of standard hand tools.

Preliminary Steps

1. Check oil level in supply tank.
2. Make sure all oil line valves are open.
3. Examine combustion chamber for excessive unburned oil. Clean if necessary.
4. Measure line voltage at primary control input connections. It should be 120 volts. Lower than 105 volts AC may cause operating problems. For Genisys primary control, the voltage must be 102-132 Vac. If there is no reading, check for open switches or circuit breakers.
5. Make sure thermostat or other controlling device is calling for burner operation.
6. Check primary control to see if safety reset switch is “locked out.”

Determining Malfunction Causes

1. Disconnect nozzle line connector tube and reposition it so that it will deliver oil into a container. Tighten flare nut at pump discharge fitting.
2. Reset primary control safety switch if it is locked out. Turn power ON. Observe the following:

   -**Contact action of primary relay control.** Does it pull in promptly, without arcing erratically or chattering?

   -**Oil Delivery.** You should have an immediate, clear, steady stream. White frothy oil means air in the supply system, which must be corrected. No delivery means severe restriction somewhere.

   -**Ignition arc.** You should hear ignition arc buzzing. If not, test output voltage of transformer. If below 9,000 volts, replace.

   -**Motor.** Does it pull up quickly and smoothly? Listen for RPM change and audible “click” as the centrifugal switch disconnects start (auxiliary) winding.

If cause of failure has not been identified:

-Reconnect nozzle line fittings for burner fire test.

-Reset primary control if necessary. Run several cycles. Observe flame quality. Use a flame mirror, if possible, to see if flame base is stable and close to combustion head. Is flame centered, uniform in shape, and relatively quiet? Are head and chamber free of carbon formations or impingement? Sometimes a defective or partially plugged nozzle can cause trouble.

Additional Procedures:

If the problem still has not been identified, a more thorough evaluation of the basic system must be made. The following procedures may be helpful:

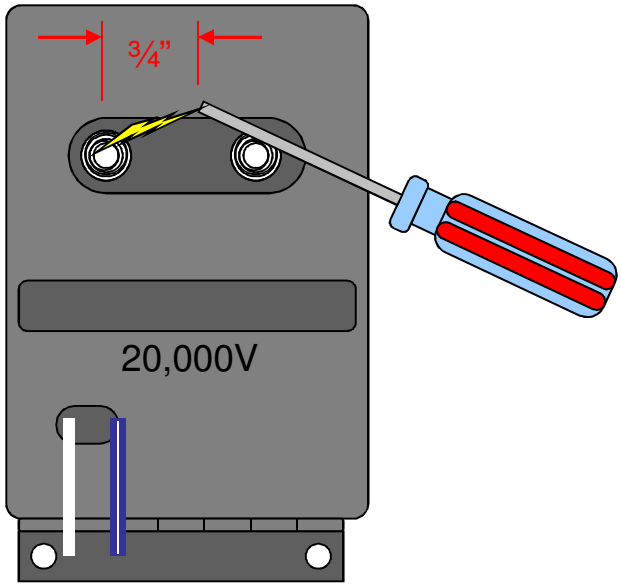
Primary Control System (Cad Cell Type) starts burner, supervises operating cycles, shuts burner off at end of heat call, and locks out ON SAFETY if there is a flame failure.

1. Measure electrical voltage at primary input (usually black) and neutral lead (usually white) connections. It should be 120 volts.
2. Jumper thermostat (T_W & T_R terminals) or otherwise energize primary control.
3. Control relay should pull in. If not, make sure wiring connections are secure and cad cell is not “seeing” stray light (chamber glow).
4. If relay pulls in, but motor fails to start, measure voltage between neutral lead (usually white) and primary control lead for motor (usually orange). Relay switch contacts may be defective, causing a severe voltage drop.
5. If relay fails to pull in, or is erratic and chatters, even when wiring connections are secure, replace control.
6. Check safety lockout timing by removing one F (cad cell) lead from control. Start burner and count seconds until control locks out. Time should be reasonably close to rating plate specifications on primary control body.
7. To check cad cell, start burner and unhook both cad cell leads from control FF terminals. Jumper FF screw terminals to keep burner operating. Measure OHMS resistance across cad cell leads **as it views the flame.** It should be 1600 OHMS or less. Preferred reading is 300-1000 OHMS. Next, with meter connected to cad cell leads, turn burner OFF. DARK conditions should give a reading of 100,000 OHMS or infinity. If reading is lower, let refractory cool down, and check for stray light entering burner through air inlet, or around transformer base-plate. If cad cell is not performing within these guidelines, replace it.

8. The control may be governed by a room thermostat. Be sure heat anticipator setting or rating of the thermostat matches the 24 volt current draw. This information is usually printed on the control body. Erratic operation may be caused by improper anticipator settings. Settings are typically .2 or .4 amps. This value can usually be measured by connecting a multitester in SERIES with one of the TT leads, and reading the value on the appropriate milliampere scale.

The Ignition System is generally comprised of an ignition transformer and two electrodes that deliver a concentrated spark across a fixed gap to ignite oil droplets in the nozzle spray. Delays in establishing spark at the beginning of the burner cycle can result in "puff backs," which can fill the room with fumes. If spark is inadequate, burner may lock out on safety. If transformer is suspect, make the following checks:

1. Measure voltage between transformer/primary lead and neutral connection. It should be 120 volts on the primary input side.
2. Secondary terminals of a good transformer deliver 10000 volts each to ground, for a total of 20,000 volts between the terminals. Measure this with a transformer tester or use a well-insulated screwdriver to draw an arc across the two springs. This should be at least 3/4" in length. Check each secondary output terminal by drawing a strong arc between the spring and base. If arc is erratic, weak, or unbalanced between the two terminals, replace transformer.



3. Transformer failures and ignition problems can be caused by the following:

- An excessive gap setting on ignition electrodes will cause higher than normal stress on the internal insulation system. This can lead to premature failure. Set electrode gap according to manufacturer's instructions (typically 5/32"). See diagram on page 12 And AFG Burner manual.
- High ambient temperatures can lower effectiveness of internal insulation system.
- High humidity conditions can cause over-the-surface arc tracking, both internally and externally, on ceramic bushings.
- Carbon residue and other foreign materials adhering to porcelain bushings can contribute to arc tracking and subsequent failure.

-Low input line voltage can cause reduced transformer life. It should be at least 105 volts AC.

-Electrode insulating porcelains must be clean and free of carbon residue, moisture, crazing, or pin hole leaks. Leakage paths can contribute to faulty ignition.

-Electrode settings must conform to specifications for gap width, distance in front of nozzle face, and distance above the nozzle center line. Improper positioning can produce delayed ignition, spray impingement on electrodes, carbon bridging, and loss of ignition, which can lead to safety lockouts.

-Replace electrodes if tips are worn or eroded. Replace questionable porcelain insulators.

The Burner Motor drives the blower wheel and fuel pump by means of a shaft coupling. To diagnose motor problems, follow these guidelines:

1. Motor fails to start.

-Check for adequate voltage between motor/primary lead and neutral connection with the motor energized. Line voltage must be within 10% of motor rating plate specified voltage.

-If motor hums when energized, but shaft does not rotate, the start switch may be defective. With the power turned OFF, rotate blower wheel by hand. If it turns freely, replace motor.

-If blower does not turn freely, check for a bound fuel unit, jammed blower, dry bearings, or a grossly misaligned shaft coupling. Oil bearings with SAE 20W oil. Or, if permanently lubricated, does not need to be oiled.

2. Other motor-related problems.

-If overload protection has tripped, start motor and measure current draw. It should not exceed rating plate specifications under load conditions by more than 10%. Excessive amp draw usually indicates an overload condition, defective start switch, or shorted windings.

-If motor is noisy, check alignment of shaft with coupling. Tighten or slightly loosen motor-to-burner-housing bolts in an alternate sequence. Check for loose blower wheel, excessive radial shaft play or loose start switch parts.

-It is difficult, and usually not cost effective, to rebuild motors in the field. Replace them, instead.

-If motor operates normally, but does not drive pump shaft, check coupling for slippage due to stripped end caps.

The Fuel Pump transfers oil from the supply tank, cleans it with a strainer or similar mechanism, pressurizes the oil for good atomization at the nozzle, and provides a good shutoff at the end of the run cycle. Manufacturers provide excellent installation and service information. Please read and follow it carefully. Many burner problems can be traced to incorrect installation of oil piping and fittings.

Nozzles

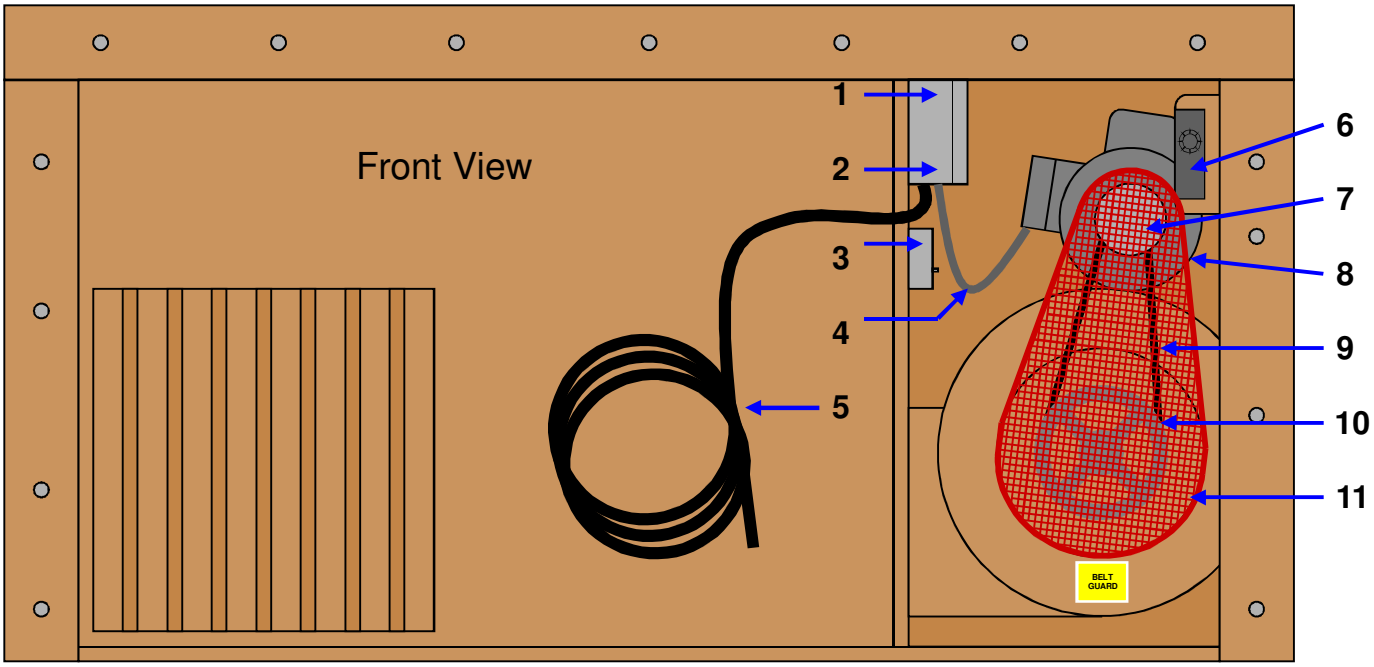
Oil burner nozzles come in a wide range of designs and sizes. It is essential that the correct nozzle be used in each installation to assure compatibility with the burner and produce the desired spray pattern for the appliance in which the burner is used.

When replacing nozzles, it is usually best to use a nozzle identical to the one supplied as original equipment by the manufacturer. Consult Siebring Manufacturing for specifications on your furnace whenever possible. Do not assume the nozzle currently in use is the correct one. It may have been installed in error during a prior burner servicing.

Proper Nozzle Installation

1. Make sure the fuel supply is clean and free of air or bubbles.
2. Make sure the pump pressure is set properly, 100 – 120 PSI.
3. Inspect the nozzle adapter before installing the nozzle. If there are deep groves cut into it from over tightening, replace it. Those grooves or a scratched surface, may cause leaks.
4. When installing the nozzle, use extreme care to protect the nozzle orifice and strainer. If the orifice gets dirt in it, or becomes scratched, it will not function properly.
5. Do not over tighten the nozzle when installing. Excessive tightening can cut grooves into the adapter and cause leaks when the next nozzle is installed.

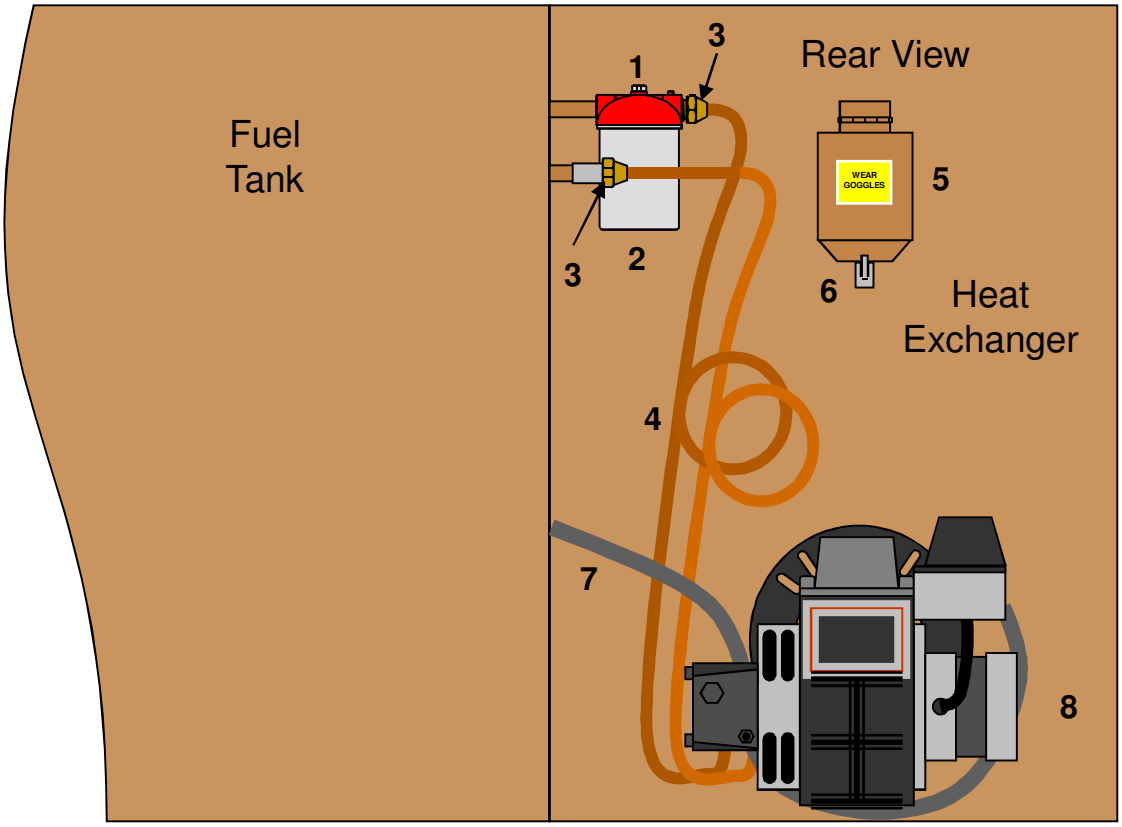
401 PARTS



1. Square D breaker box
2. 25A Circuit Breaker
3. Fan & Limit Switch
4. Conduit
5. Power Cord 25’ 12-3 (no plug)
6. Thermostat
7. Drive Pulley 3 ¾” - 60 Hz. or 4 ½” - 50 Hz.
8. 1 HP Motor *
9. 49” V-Belt
10. 9” Driven Pulley (blower)
11. Belt Guard

* ***DO NOT*** *replace blower motor with farm duty or manual reset model*

401 PARTS (continued)



1. Fuel Filter Assembly S254
2. Fuel Filter cartridge AO25
3. ⅜" Pipe to ⅜" Flare fitting (2)
4. ⅜" Copper Tubing (1 @ 58" 1 @ 64")
5. Inspection Door
6. Inspection Door clasp
7. Weatherproof Conduit (105")
8. Beckett Burner Parts
   (Refer to Beckett AFG Manual)